COMPILATION OF APPROVED SPECIFICATIONS

RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2004 EDITION

REVISIONS SUPPLEMENTAL SPECIFICATIONS SPECIAL PROVISIONS

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Revise Section 212; Maintenance and Cleaning of Erosion and Pollution Controls, pages 2-51 to 2-55 of the RI Standard Specifications for Road and Bridge Construction, 2004 edition as follows.

SECTION 212

MAINTENANCE AND CLEANING OF EROSION AND POLLUTION CONTROLS

• Replace paragraph (b) of Subsection 212.01.2 with the following.

b. Maintenance. Maintenance consists of the restoration and repair of damage sustained by erosion and pollution controls from "normal" rainfall events (Abnormal weather events are defined in **Subsection 212.03.4; Failure of Erosion and Pollution Controls**).

• Replace the third paragraph of Section 212.03 with the following.

Erosion and pollution controls shall be routinely inspected by the Engineer. The Engineer shall immediately notify and direct the Contractor to take corrective action and make all necessary repairs whenever maintenance of the erosion and pollution controls is required. The Contractor shall commence with the requisite cleaning and maintenance measures no later than the next consecutive calendar day after receiving such a directive from the Engineer, and shall aggressively and expeditiously perform such cleaning and maintenance work until the original problem is remedied to the complete satisfaction of the Engineer. In the event of a holiday or weekend storm event, the Contractor must have resources available to restore and, if necessary, to replace any damaged erosion controls.

• Replace Sections 212.04 and 212.05 with the following.

212.04 METHOD OF MEASUREMENT. "Maintenance and Cleaning of Erosion and Pollution Controls" as specified in this Section will not be measured by a single unit of measurement usually associated with a specific Proposal item. Rather, this work will be documented and paid for on a Force Account basis as set forth in **Subsection 212.05**.

212.05 BASIS OF PAYMENT. The "Maintenance and Cleaning of Erosion and Pollution Controls" will be paid for on a Force Account basis as set forth in Subsection 109.04; Differing Site Conditions, Changes, Extra Work and Force Account Work; Para. a(4) of these Specifications.

The estimated total amount established by the Department and indicated for this item in the Schedule of Prices in the Proposal is the amount from which said Force Account payments will be drawn.

Revise **Section 817**; **Repairs to Structure Concrete Masonry**, pages 8-110 to 8-116 of the RI Standard Specifications for Road and Bridge Construction, 2004 Edition as follows.

SECTION 817

REPAIRS TO STRUCTURE CONCRETE MASONRY

• Replace Section 817.01 with the following.

817.01 DESCRIPTION. This work consists of making repairs to structure concrete masonry by removing and disposing deteriorated concrete, preparing bonding surfaces of concrete and reinforcing steel, and replacing the deteriorated concrete with approved mortar or concrete to the lines and grades specified and at the locations indicated on the Plans or as directed by the Engineer all in accordance with these Specifications.

• Replace Subsection 817.02.5 with the following.

817.02.5 Form and Cast-in-Place Concrete. Concrete shall conform to Class HP(AE) 3/8" concrete in accordance with the applicable provisions of **SECTION 601**; **Portland Cement Concrete** and **SECTION 604**; **Class HP Portland Cement Concrete**, of these specifications.

• Replace Subsection 817.03.4b with the following.

b. Placing and Consolidation. Prior to placing the patching mortar, an epoxy bonding agent conforming to **Subsection 817.02.4** of these Specifications shall be applied to all exposed reinforcing and mating concrete surfaces.

The Contractor shall follow the manufacturer's recommendations for application and curing of the epoxy bonding agent prior to placing the patching mortar. The patching mortar shall not be placed if the epoxy bonding agent has exceeded the manufacturer's recommended contact time. If the epoxy bonding agent has exceeded its contact time, the Contractor shall follow the manufacturer's recommendations for reapplication. An epoxy bonding agent with an extended contact time should be used if required by the timing of concrete placement and/or weather conditions.

The patching mortar shall be placed in accordance with the manufacturer's recommendations, otherwise it shall be placed in maximum 1-inch lift layers within 5-to-10 minutes after mixing water is added to avoid the rapid setup of the material.

If more than one lift layer is required to perform the repair, the previously placed lift layer shall not be allowed to dry. Its surface shall be roughened prior to placing the next layer.

• Add the following new Subsection 817.03.5.

817.03.5 Application of Form and Cast-in-Place Concrete

- a. General. Repairs accomplished by the form and cast-in-place method shall be performed in accordance with the applicable requirements of **Section 808, CAST-IN-PLACE STRUCTURE CONCRETE MASONRY** of these specifications.
- **b. Bonding to Existing Surfaces** Prior to placing the Cast-in-Place Concrete an epoxy bonding agent conforming to **Subsection 817.02.4** of these Specifications shall be applied to all exposed reinforcing and mating concrete surfaces.

The Contractor shall follow the manufacturer's recommendations for application and curing of the epoxy bonding agent prior to placing the cast-in-place concrete. The cast-in-place concrete shall not be placed if the epoxy bonding agent has exceeded the manufacturer's recommended contact time. If the epoxy bonding agent has exceeded its contact time, the Contractor shall follow the manufacturer's recommendations for reapplication. An epoxy bonding agent with an extended contact time should be used if required by the timing of concrete placement and/or weather conditions.

c. Final Finish. All repaired surfaces shall be finished straight and true, approximating the original contour as close as practicable. The final finish shall have a steel trowel, wood float, or other finish approximating the existing adjacent concrete finish.

• Replace Sections 817.04 and 817.05 with the following.

817.04 METHOD OF MEASUREMENT. "Repairs to Structure Concrete Masonry - Pneumatically Applied Mortar", "Repairs to Structure Concrete Masonry - Patching Mortar" and "Repairs to Structure Concrete Masonry - Form and Cast-in-Place Concrete" will be measured by the number of cubic feet of the respective mortars or concrete actually applied in accordance with the Plans and/or as directed by the Engineer.

817.05 BASIS OF PAYMENT. The accepted quantities of "Repairs to Structure Concrete Masonry - Pneumatically Applied Mortar", "Repairs to Structure Concrete Masonry - Patching Mortar" and "Repairs to Structure Concrete Masonry - Form and Cast-in-Place Concrete" will be paid for at the respective contract unit prices per cubic foot as listed in the Proposal. The prices so stated shall constitute full and complete compensation for all labor, materials, equipment described above, including scaffolding, and all other incidentals required to finish the work, complete and accepted by the Engineer.

Delete **Subsection M.04.02.1; Ductile Iron Pipe,** page M-20 of the RI Standard Specifications for Road and Bridge Construction, 2004 Edition in its entirety and replace with the following.

SECTION M.04

DRAINAGE

M.04.02.1 Ductile Iron Pipe. All ductile iron pipe, joints, fittings and appurtenances shall be Class 52 and meet the requirements of the latest revisions and addenda of the following standard specifications.

- **a.** American National Standards Institute, ANSI (parenthesis designations are American Water Works Association designations for the standard).
 - 1. A21.51 (C151) Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand Lined Molds, for Water and Other Liquids.
 - 2. A21.11 (C111) Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings.
 - 3. A21.53 (C153) Ductile Iron Compact Fittings.
 - **b.** ASTM A716 Ductile Iron Culvert Pipe.